



ISDN Router

with 10/100 LAN port

User's Manual v1.0

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SUPPORT

If you have any problems with the ADSL Router, please consult this manual.

If you continue to have problems you should contact the dealer where you bought this ADSL Router. If you have any other questions you can contact the Atlantis Land company directly at the following address:

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1.1 An overview of the ISDN Router

The device is a small desktop router that sits between your local Ethernet network and a remote network (For example, the Internet or a remote office). It contains an ISDN S/T interface, a 10/100 Base-T LAN port, and an auxiliary port for a directly connected management console.

Data comes into ISDN Router from the LAN and then is “routed” to the remote network, and vice versa. In addition to its capability to route IP traffic, it also acts as a bridge for other network protocols, such as Appletalk or SNA.

The main functions of the device are to support your LAN to access the Internet, to support remote users to dial in and to access resources on your LAN, and to support communications among branch offices.

The most common use for the device is to provide Internet access, so that everyone on your LAN can surf the web, send/receive e-mail or files. It automatically acquires the necessary IP address when the connection to the Internet is established. You don't need to apply for and assign an IP address to each PC or workstation on your network.

The device supports “bandwidth on demand”. For example, any user's initial intent to access to the Internet will trigger a B-channel connection to the Internet to be set up. As the traffic builds up (For example, more users try to access the Internet, or the same user generates a lot of traffic), it will establish a second connection through the other B-channel. As traffic decreases, one B-channel will be taken down, until finally, after a configurable period of inactivity, the remaining B-channel will also be disconnected.

1.2 Package contents

1. ISDN Router
2. AC Power Adapter
3. RS-232 cable (Null type)
4. RJ-45 ISDN cable
5. RJ-45 LAN cable
6. CD-ROM containing the on-line manual
7. Quick Start Guide

1.3 ISDN Router Features

The ISDN Router provides the following features

- The router equipped with a single ISDN Basic Rate Interface (2B+D) that supports S/T interface specification, would support European ISDN requirements.
- Supports remote access functions among branch offices and allows remote users to dial-in to your network.
- Supports IP sharing function, allowing multiple users share one Internet account.
- Supports industry standard Point-to-Point Protocol (PPP) and Multilink PPP.
- Supports Dial-on-Demand and Bandwidth on Demand function.
- User-friendly management through web-based configurator, telnet management, console port management, and remote upgrades.
- PAP/CHAP/MS-CHAP, Call Back, IP Packet Filtering, and Caller ID Authentication for firewall security.
- Supports operating systems such as Windows 95/98/NT/2000/ME, Mac, Unix and Linux

1.4 ISDN Router Application

2.1 Cautions for using the ISDN Router



Do not place the ISDN Router under high humidity and high temperature.

Do not use the same power source for ISDN Router with other equipment.

Do not open or repair the case yourself. If the ISDN Router is too hot, turn off the power immediately and have a qualified serviceman repair it.



Place the ISDN Router on the stable surface.

Only use the power adapter that comes with the package.

2.2 The front LEDs

1 2 3 4 5 6 7
| | | | | | |

LED	Meaning
1 Power	Lit when AC power is connected
2 LAN / 100/10	Lit Green when connected at 100 Mbps Lit Yellow when connected at 10 Mbps
3 LAN / ACT	Lit when connected to a LAN device Flashes when sending/receiving data
4 LAN / COL	Flashes when collisions happen
5 ISDN / SYNC	Lit when ISDN Layer 1 is activated
6 ISDN / B1	Flashes when B1 channel is in use
7 ISDN / B2	Flashes when B2 channel is in use

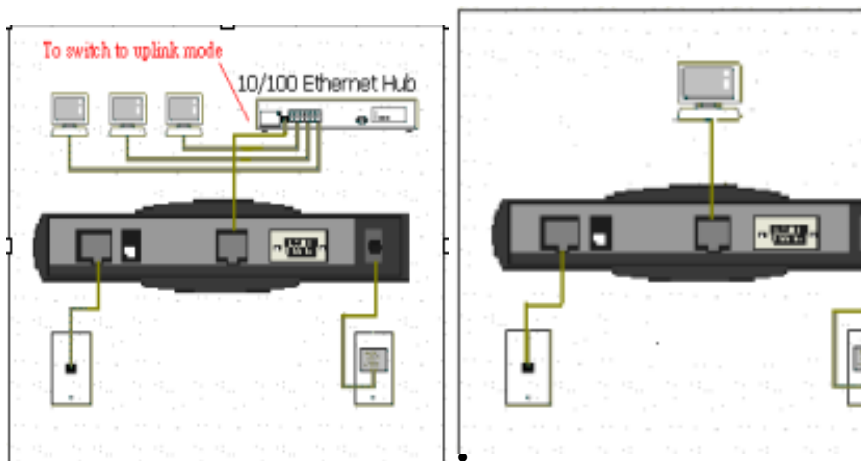
2.3 The rear ports

Power (jack)	Connect the supplied power adapter to this jack
Console (port)	Connect the supplied Null type RS-232 cable to this port when connecting to a PC's RS-232 port (9-pin serial port).
ISDN So (RJ-45 connector)	Connect an RJ-45 cable to this port when connecting to the ISDN.
LAN (RJ-45 connector)	Connect an UTP Ethernet cable to this port when connecting to a LAN such as an office or home network.

2.4 Cabling

Now you should be ready to connect your ISDN Router on your LAN and ISDN wall jacks. Follow these steps to install:

- Attach the ISDN line to the ISDN connector (S/T interface).

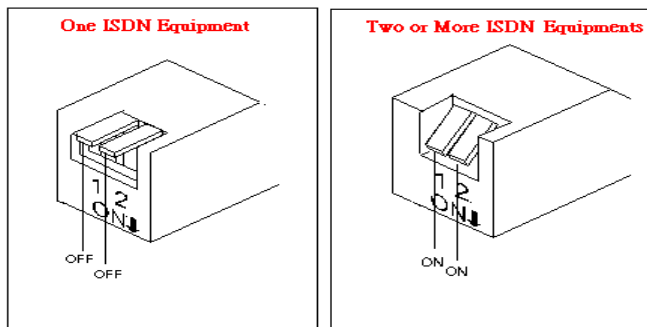


Connect the PC to the RJ-45 LAN connector. Two or more PCs can connect to a multi-port Hub first and then uplink (cascade) port on the hub must be connected to ISDN Router port.

- Plug the power adapter into a wall outlet and into the AC connector on the back of ISDN Router.
- The Auxiliary connector is only used to connect a terminal to run the Command Line Interface using the null modem cable. (This is an optional connection.)

- There is a DIP switch located on the rear panel for setting the terminating resistor.

You only need to adjust this switch if there are two or more external ISDN equipments attached to the local telephone line.



Chapter 3

Configuration

3.1 Before Configuration

This section describes the configuration required by LAN-attached PCs that communicate with ISDN Router, either to configure ISDN Router, or for network access. These PCs must have an Ethernet interface installed properly, be connected to ISDN Router either directly or through an external repeater hub, and have TCP/IP installed and configured to obtain an IP address through a DHCP server.

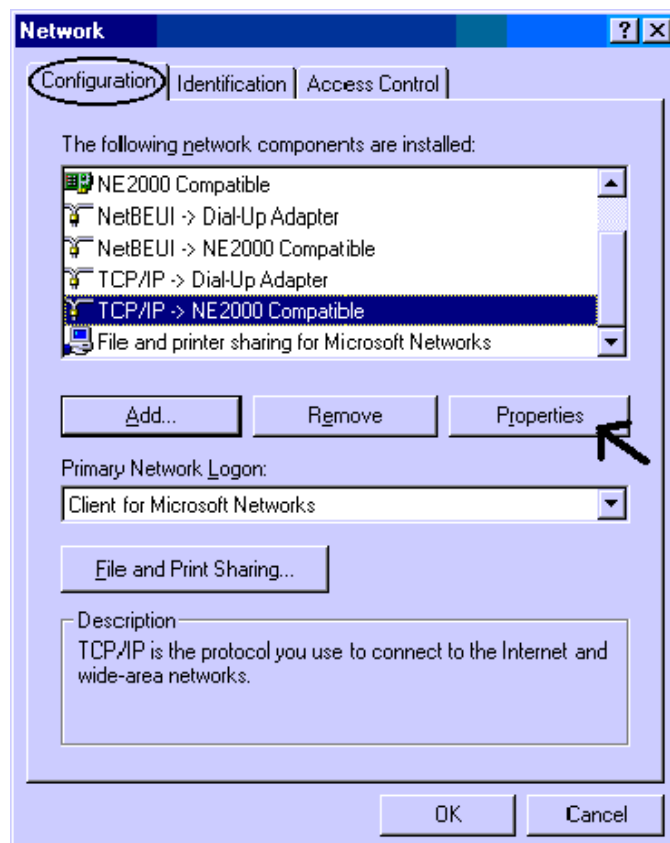
Directly connect a Windows OS to ISDN Router. If TCP/IP is not already installed, follow the steps below for its installation.



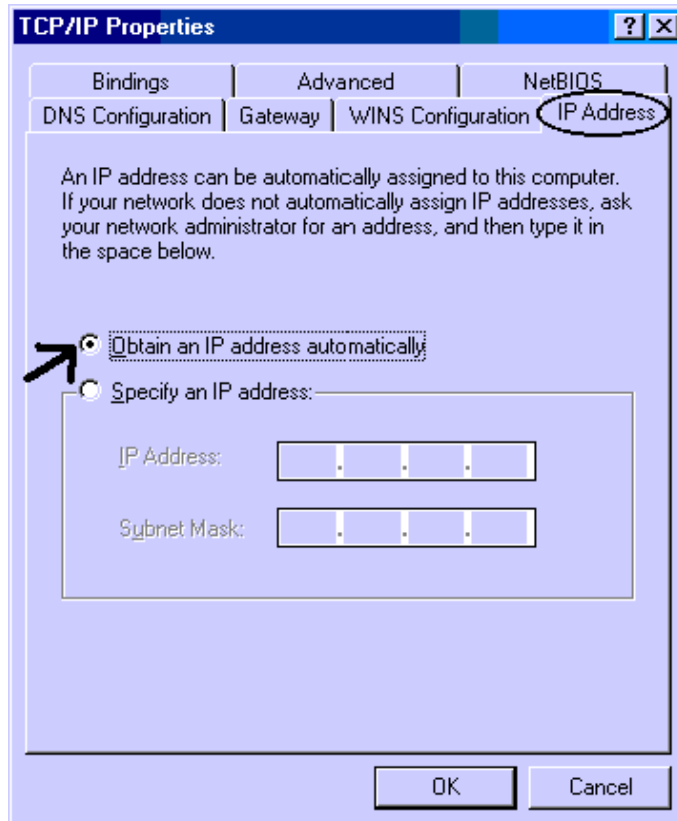
Any TCP/IP capable workstation can be used to communicate with or through ISDN Router. To configure other types of workstations, please consult the manufacturer's documentation

Configuring PC in Windows 95/98/ME

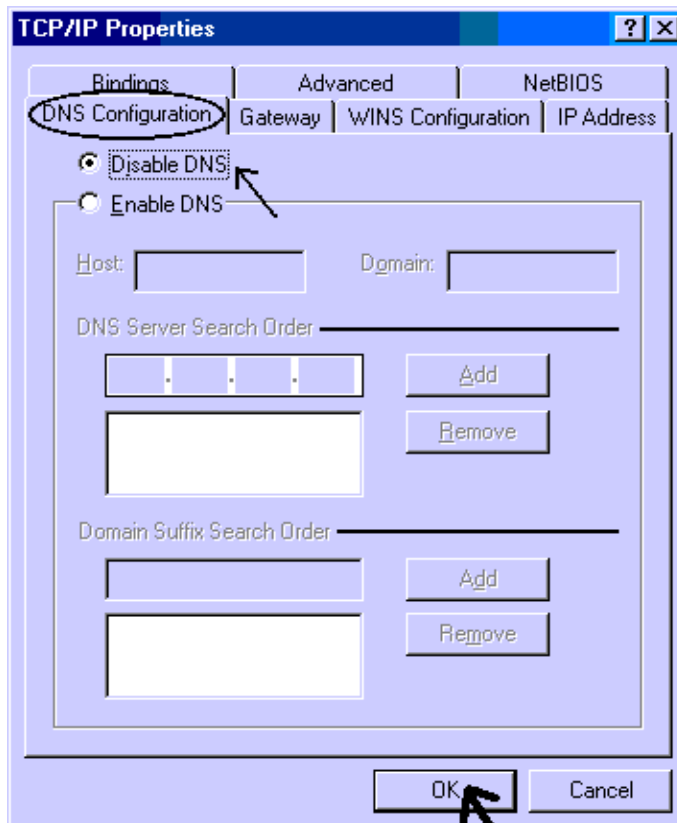
1. Go to **Start/Settings/Control Panel**. In the Control Panel double-click on **Network** and choose the **Configuration** tab.
2. Select **TCP/IP -> NE2000 Compatible**, or any Network Interface Card (NIC) in your PC.



3. Select the **Obtain an IP address automatically** radio button.

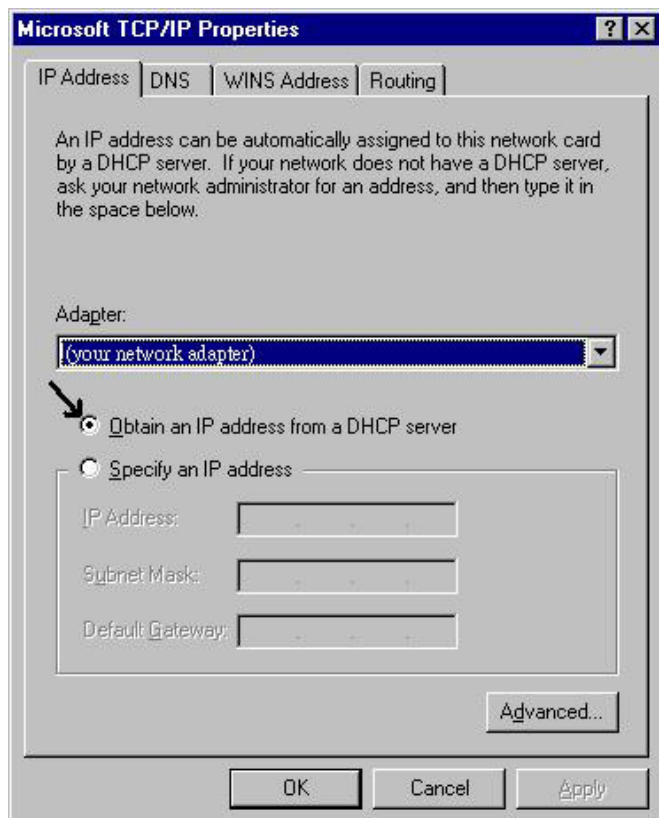
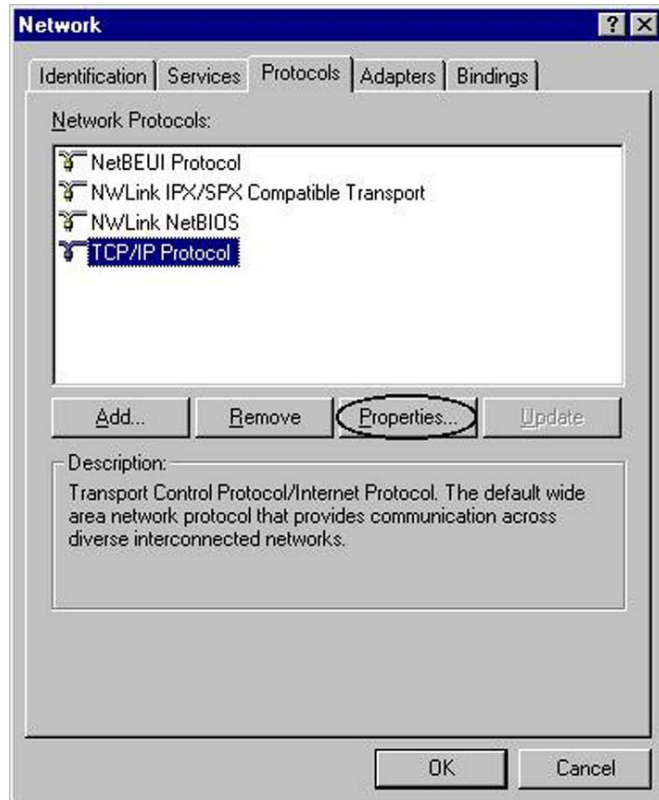


4. Then select the **DNS Configuration** tab.
5. Select the **Disable DNS** radio button and click **OK** to finish the configuration.



Configuring PC in Windows NT4.0

1. Go to **Start/Settings/ Control Panel**. In the Control Panel double-click on **Network** and choose the **Protocols** tab.
2. Select **TCP/IP Protocol** and click **Properties**.
3. Select the **Obtain an IP address from a DHCP server** radio button and click **OK**.



Configuring PC in Windows 2000

1. Go to **Start/Settings/Control Panel**. In the Control Panel double-click on **Network and Dial-up Connections**.

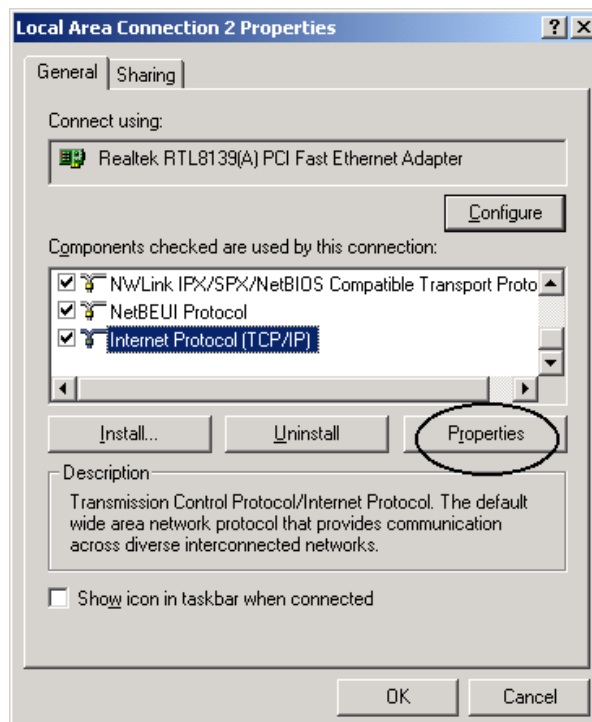
2. Double-click **Local Area Connection**.



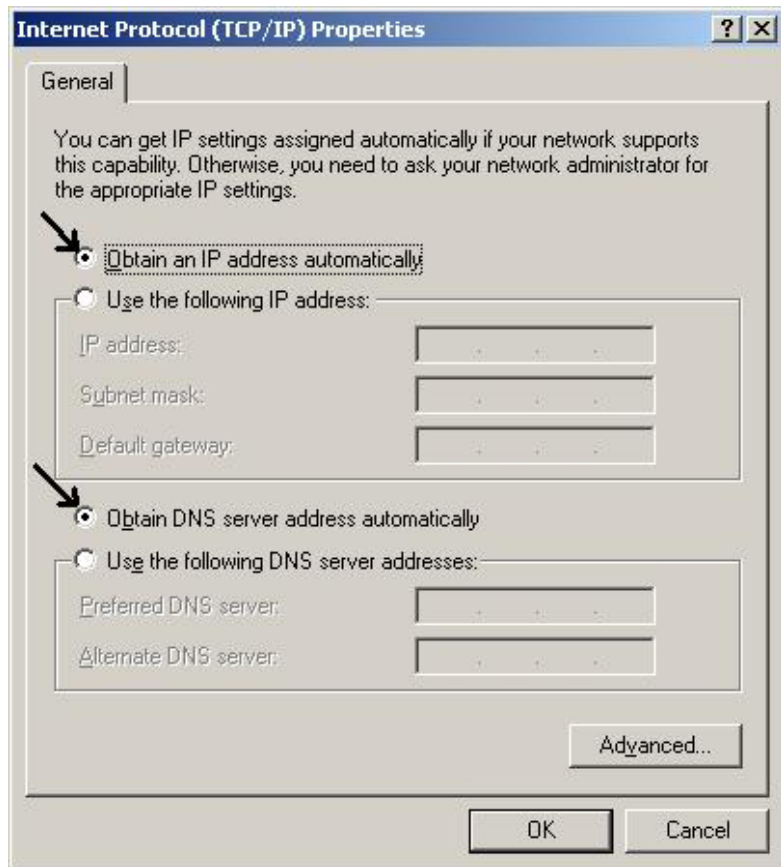
3. In the **Local Area Connection Status** window click **Properties**.



4. Select **Internet Protocol (TCP/IP)** and click **Properties**.



5. Select the **Obtain an IP address automatically** and the **Obtain DNS server address automatically** radio buttons.
6. Click **OK** to finish the configuration.



3.2 Configuring with GUI program

3.2.1 Using Different Browsers for ISDN Router

To configure your ISDN Router, you can use a popular browser, such as Netscape 4.x and Internet Explorer 5.x. The following describes how to use it to start "ISDN Router Manager" through IE or Navigator.

Netscape Navigator 4.x:

In the Location box (where you normally enter the URL address), enter the default private IP address of ISDN Router followed by hitting the return key:

<http://192.168.168.230>

Internet Explorer 5.x:

In the Address box (where you normally enter the URL address), enter the default private IP address of ISDN Router followed by hitting the return key:

<http://192.168.168.230>

3.2.2 Password

A password screen will ask you to log on after you enter the default IP address described above. If you are logging on for the first time, you should accept the factory default password (which is “password”). The password is always displayed as a string of asterisks (“*”). Clicking the **Log On** button will begin the Configurations for ISDN Router.

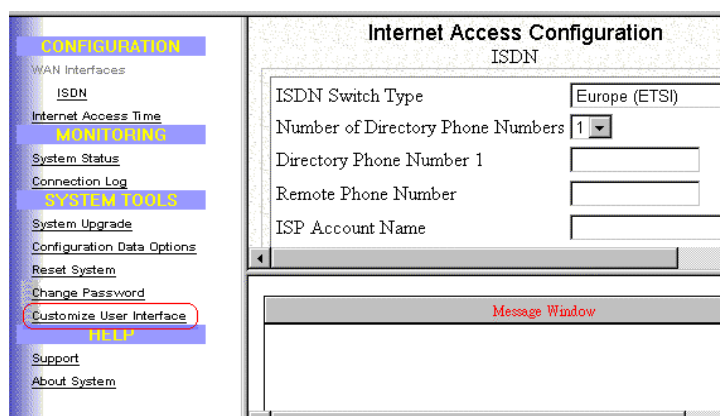


The next time you log in, even if you have modified the password, the default password (“password”) will still be used as the default. You need to change it to the correct password before you will be let in. If you forget the password, you need to follow the steps described in the latter chapter to be able to log on.

3.2.3 Customize User Interface

When you log on for the first time, click “**Customize User Interface**” in the **SYSTEM TOOLS** bar on the left side of the screen, allowing you to customize **ISDN Router Manager** to suit your own specific needs: The selections you make determine what configuration menus and buttons will appear in the screen. For example, if you select **Basic Internet Access** only, the interface will only display buttons that you need for basic Internet access.

If you subsequently use ISDN Router Manager to configure ISDN Router for other applications, you can return to this screen to “re-customize” your interface by selecting **Customize User Interface** from the **SYSTEM TOOLS** Menu.



3.2.4 Basic Internet Access Configuration

What is Basic Internet Access? It means accessing the Internet, surfing the web, accessing a remote FTP server (to send or receive files), and sending and receiving e-mail. These are the tasks that users perform most.

When you apply for an account with your Internet Service Provider (ISP), you will be given the necessary information, including your account name, account password, and the ISP's local access ISDN telephone number. Have these available and then follow the steps below.

Step 1: When you logon, select **Customize User Interface** in the SYSTEM TOOLS Menu. Accept the **Basic Internet Access** selection and click **Next**. The configuration window will be displayed,

Internet Access Configuration
ISDN

ISDN Switch Type: Europe (ETSI)

Number of Directory Phone Numbers: 1

Directory Phone Number 1: []

Remote Phone Number: []

ISP Account Name: []

ISP Account Password: []

Apply and Test

Step 2: Select the ISDN switch type that your ISP will tell you.

Step 3: Select the number of the directory phone numbers and enter the directory phone numbers in the corresponding blanks.

Step 4: Enter the following information:

Remote Phone Number: the ISDN telephone number of your ISP.

ISP Account Name: the username of your ISP account.

ISP Account Password: the password of your ISP account.

Step 5: Click **Apply and Test**.

After the successful **Apply and Test**, any users in the LAN should restart their PC. Now you can surf in the Web, receive E-mails, or transmit files. For more advanced configurations, refer to the following context.

3.2.5 Internet Access with Advanced Configuration

Step 1: When you logon, select **Customize User Interface** in the SYSTEM TOOLS Menu. Accept the **Internet Access with Advanced Configuration** selection and click **Next**. The configuration window will be displayed. Skip to Step 5 if you have already completed **Basic Internet Access** Configuration described in the previous section.

Internet Access Configuration
ISDN

ISDN Switch Type	Europe (ETSI)
Number of Directory Phone Numbers	2
Directory Phone Number 1	
Directory Phone Number 2	
Remote Phone Number	
ISP Account Name	
ISP Account Password	

Step 2: Select the ISDN switch type that your ISP will tell you.

Step 3: Select the number of the directory phone numbers and enter the directory phone numbers in the corresponding blanks.

Step 4: Enter the following information:

Remote Phone Number: the ISDN telephone number of your ISP.

ISP Account Name: the username of your ISP account.

ISP Account Password: the password of your ISP account.

Step 5: Click **Advanced** and the following configuration window will appear.

Internet Access Configuration
ISDN

Multilink Usage	Two channels only when needed
Data Service	Auto
(Optional) Remote Sub-Address	
STAC Compression	<input checked="" type="radio"/> Yes <input type="radio"/> No
Idle Timeout (0-3600 seconds)	120
Advice of Charge Support	<input checked="" type="radio"/> Yes <input type="radio"/> No
Unit Price (If required, check with service provider)	
(Optional) Currency	

Step 6: Set **Multilink Usage** parameters. This determines how the device utilizes the two B channels for your Internet connection. Available options are:

One B Channel Only:

Two B Channels Only When Needed:

Always two B Channels:

Step 7: Select **Data Service**. Available options are **Data Over Voice Channel**, **64K** , **56K** , and **Auto**. Recommended selection is **Auto**.

Step 8: Enter **Remote Sub Address Number** if necessary.

Step 9: Select **STAC compression** option.

Step 10: Set **Idle Timeout** number. The range is from 0 to 3600 seconds.

Step 11: Select **Advice of Charge Support** option and enter the **Unit Price** and **Currency** in the corresponding blanks if the selection is **Yes**.

Step 12: Click **OK** to return to the main configuration screen and skip to next step. Otherwise click **Alternative Number** if there is one or more alternative remote phone numbers. Enter the alternative remote phone number in the corresponding blanks. Then press **OK** to return to the previous screen. Again press **OK** to back to main configuration screen.

Internet Access Configuration
ISDN

Number of Alternate Remote Phone Numbers 2

Alternate Choice #1
Remote Phone Number

Alternate Choice #2
Remote Phone Number

Cancel OK

Step 13 Click **Apply and Test**

3.2.6 IP Configuration for Internet Access

Using **IP** options in the Menu Window, you can assign a public IP address to ISDN Router, modify the private IP address, DNS addresses, and enable or disable DHCP.

Step 1: Select **Internet Access with Advanced Configuration** from ISDN Router Manager. Then click **IP** from the Menu Window.

Step 2: The **Advanced Internet Access Setup** screen appears:



To install public servers on your network (For Example, Web or ftp servers), you need to apply for an IP address for each server plus one for the LAN port. All these public IP addresses have to belong to the same IP network

Set the following parameters:

Public IP Address: the public IP address for the LAN interface on ISDN Router.

Public IP Netmask: the network mask for the public network address on LAN.

Private IP Address: the private IP address for the LAN interface on ISDN Router. The default private IP address is [192.168.168.230](#).

Private IP Netmask: the network mask for your private network. Its value is [255.255.255.0](#), and cannot be changed.

Primary DNS IP Address: the IP address of the primary Domain Name Server (DNS). If properly configured, when a device reboots and acquires the IP address from ISDN Router, the IP addresses of both the primary and the secondary DNS server will be provided for client workstations or PCs.

Secondary DNS IP Address: the IP address of the secondary domain name server.

DHCP: If you want to act, as a DHCP server and assigns private IP addresses to any requesting DHCP client, make sure DHCP is enabled. When enabled, it will provide an IP address, network mask, gateway address (ISDN Router's private IP address), and DNS addresses to any workstations on the local area network that are configured as a DHCP client. Devices on your network that are configured with public IP addresses are not DHCP clients. Therefore, you need to assign their IP addresses, network mask, and default gateway's IP address, primary and secondary DNS IP addresses manually.

IP Address Assignment-High & Low: the setting about the maximum and minimum of private IP address for each client PC or workstation in the LAN. The range is from 1 to 254.

Step 3: Click **Routing**, **Address Translation** or **Static DHCP** if it is necessary to set these configurations. Otherwise click **Apply** to confirm the configuration and return to the main configuration screen.

3.2.7 The IP Routing Table

The IP Routing Table contains all the information that the ISDN Router needs to route an IP data packet. You can view the IP Routing Table by clicking on the **Routing** button at the bottom of the Advanced Internet Access Setup screen (described in the previous section). From this screen, you can also add new routing entries to the table. The following screen shows an example of the IP Routing Table.

Dest IP	Netmask	Gateway IP	IfName	Hops	Flag
192.168.168.0	255.255.255.0		lan	0	C

An entry for a specific host or network may be added manually. An “S” in the Flags field indicates this “static route”. Other flag field entries are “H” for host, and “G” for gateway.

Follow the steps to add or to change the default route or add a static route:

Step 1: Click the **Add** button in the IP Routing Table screen to display the following screen:

IP Routing Table	
Add IP	<input type="radio"/> Default Route <input checked="" type="radio"/> Static Route
Remote IP Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Remote IP Netmask	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Gateway	<input checked="" type="radio"/> IP Address <input type="radio"/> Interface
	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Hop Count	<input type="text" value="1"/>

Step 2: Enter the following information:

Default Route: select if you want to specify a new default route. Note that the Remote IP Address and Remote IP netmask fields do not appear if you select this option. **CAUTION:** Mis-configuring the default route may result in abnormal system behavior and/or unnecessary telephone charges.

Static Route: select if you want to add a static route.

Remote IP Address: the remote IP address of the new route.

Remote IP Netmask: the IP netmask of the new route.

Gateway: identifies if the gateway is an IP address or interface.

Hop Count: the maximum number of hops for this route.

Step 3 Click **APPLY**.

3.2.8 IP Address Translation Configuration

For security and economic purposes, the device supports Single User Account feature (SUA). Multiple users in the LAN can share a public IP address from ISP and Internet users would view the whole LAN as a big “device”.

3.2.9 Add or Edit IP Address Translation

Step 1: Click **Address Translation** button in the Advanced Internet Access Setup screen. The following **IP Address Translation Configuration** screen will appear.

The screenshot shows a window titled "IP Address Translation Configuration" with a subtitle "Static Address Translation Table". Inside the window is a table with three columns: "Public Port Number", "Private IP Address", and "Private Port Number". The table is currently empty. Below the table are four buttons: "Add", "Edit", "Delete", and "Refresh".

Step 2: Click **Add** for adding a set of IP address translation, or click **Edit** for editing an existing set of IP address translation after selecting the set of IP address translation that you want to edit. The Following screen will appear.

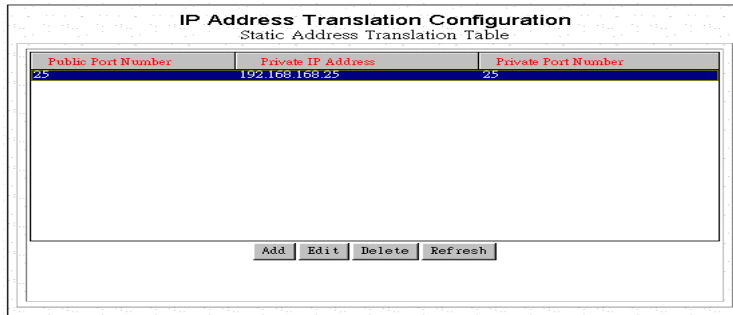
The screenshot shows a dialog box titled "IP Address Translation Configuration" with a subtitle "Add A Static Entry". Inside the dialog, there are two radio buttons: "Default Entry" (unselected) and "Static Entry" (selected). Below the radio buttons are three input fields: "Public Port Number" (empty), "Private IP Address" (containing "192.168.168." followed by an empty field), and "Private Port Number" (empty). At the bottom of the dialog are two buttons: "Apply" and "Cancel".

Step 3: Enter the following parameters.

Add Address Translation: Available options are Default Enter and Static Entry.

Public Port Number: The public port number corresponding to the service that the specific server provides.

Private IP Address: The private IP address that you want to assign to the server.



Private Port Number: The private port number corresponding to the service that the specific server provides. Public Port Number and Private Port Number should be the same.

Step 4: Click **Apply**.

Delete a Set of IP Address Translation

Step 1: Select the set of IP address translation that you want to delete from the IP Address Translation Configuration screen.

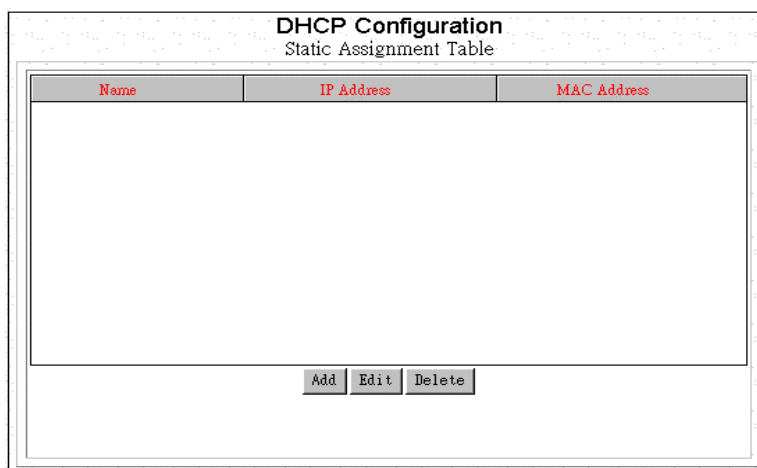
Step 2: Click **Edit**.

3.2.10 Static DHCP Configuration

By built-in DHCP feature, the device can automatically assign a private IP address to each PC or workstation in the LAN. But under some situations, you need to set a static private IP address for certain PCs or workstations. Follow the steps to assign a static private IP address to a PC or a workstation.

Add or Edit a Set of static private IP address

Step 1: Click **Static DHCP** from Advanced Internet Access Setup Screen. The following screen will appear.



Step 2: Click **Add** for adding a set of static private IP address, or click **Edit** for editing a existing set of static private IP address after selecting the set of static private IP address. The following screen will appear.

DHCP Configuration
Add A Static Entry

Name

IP Address 192.168.168.

MAC Address

Name: A name is assigned for router manager identification purpose.

IP Address: The static private IP address that you want to assign.

MAC Address: The MAC address of the physical interface between the device and the PC or workstation.

Step 3: Click **Apply**.

Delete a Set of static private IP address

Step 1: Select the Set of static private IP address that you want to delete form the DHCP Configuration window.

Step 2: Click **Delete**.



The remote site does not have to have an ISDN router, and may not be configurable by the local administrator. Make sure the configuration matches the requirements of the remote site

4.1 Remote Office Access by ISDN

To configuring the ISDN interface for Remote Office connectivity, follow these steps:

Step 1: Select **Access to/from Remote Site** in the **ISDN Router Manager** screen and click **Next**:

The screenshot shows a window titled "ISDN Router Manager". Below the title, it says "Select one or more items to be configured during this management session". There are four checkboxes: "Access to/from Remote Site (e.g., Branch Office)" (checked), "Dial-in Access for Off-Site Users", "Basic Internet Access", and "Internet Access with Advanced Configuration". A "Next" button is located at the bottom center.

Step 2: If you have already configured your ISDN interface, skip to Step 3. Otherwise, configure your ISDN interface in the way described in the chapter 3.

Step 3: Click **Connection Profiles** in the Menu Window. The **Connection Profile Summary** window will appear if there is already any connection profile configured previously.

The screenshot shows a window titled "Connection Profile Summary". It contains a list box with the text "Select a Connection Profile" and a list of items: "New" (highlighted) and "Remote dial-in/out: Remote Site A". At the bottom, there are "Next" and "Delete" buttons.

Step 4: Select **New** and Click **Next**, the **Connection Profile Configuration** window should appear as follows,

The screenshot shows a window titled "Connection Profile Configuration" with a subtitle "Remote Office Access by ISDN". The window contains several fields and controls:

- Profile Name:** A text input field.
- Call Direction:** A dropdown menu currently set to "Both".
- Call Back:** Radio buttons for "Yes" (selected) and "No".
- Call Back Phone Number:** A text input field.
- Remote Phone Number:** A text input field.
- My Account Name:** A text input field.
- My Account Password:** A text input field.
- Incoming Authentication:** A dropdown menu set to "CHAP/PAP/MS-CHAP".
- Remote Account Name:** A text input field.
- Remote Account Password:** A text input field.

At the bottom of the window are three buttons: "Apply and Test", "Cancel", and "Advanced".

Step 5: Enter the following information:

Profile Name: a name associated with this profile.

Call Direction: if the remote site will be dialing in, select **Incoming**. If the device will dial out to the remote site, select **Outgoing**. Select **Both** if either side can initiate the connection. The default setting is **Both**.

Call Back: if Call Back is enabled (**Yes** is selected), it checks the Remote System Name and Remote Password. If a call is received and authentication succeeds, it disconnects the incoming call, and calls the number in the Call Back field. If Call Back is not enabled (**No**), the Call Back Number field will not display. If the Call Direction is **Outgoing** only, Call Back options will not display.

Remote Phone Number:

My System Name:

My System Password:



Make sure the remote site is configured with the same values you specify in My System Name and My System Password.

Remote System Name:

Remote System Password:

Step 6: If you selected **Outgoing** or **Both** as your **Call Direction**, click **APPLY and TEST**, or select **ADVANCED** for more options. You must still click **Apply and Test** even if the other end of the connection has not been configured. In this case the test will fail, but that can be considered normal.

4.2 Advanced Options for Remote Office Access Profiles

If you press the **Advanced** button from the above **Connection Profile Configuration**, the following screen appears.

Connection Profile Configuration
Remote Office Access by ISDN
Caution! Modifying a profile may be disruptive to active users

Data Service	Auto
(Optional) Remote Sub-Address	
Caller ID Authentication	<input checked="" type="radio"/> Yes <input type="radio"/> No
Caller ID Number	
STAC Compression	<input checked="" type="radio"/> Yes <input type="radio"/> No
Idle Timeout (0-3600 seconds)	120
Enable IP	<input checked="" type="radio"/> Yes <input type="radio"/> No
IP RIP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
IP RIP Version	RIP-1
Set as IP Default Route (e.g., for Internet Access)	<input type="radio"/> Yes <input checked="" type="radio"/> No
(Optional) Remote IP Address	
(Optional) Remote IP Netmask	
Enable Bridging	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Cancel OK Multilink Alternate Numbers

Step 1: Set any of the following parameters:

Data Service: choose **64K**, **56K**, or **Auto**. Select **Auto** unless you know the speed required by the other end of the connection requiring either 64K or 56K.

Remote Sub-Address:

Caller ID Authentication: select **Yes** if you want to check the caller ID before accepting the call. This service may require a special agreement with your ISDN service provider.

Caller ID Number:

STAC Compression: allows outgoing data to be compressed to achieve higher throughput, and compressed incoming data to be recognized. The ability to use compression depends on the capabilities of the ISP.

Idle Timeout: the number of seconds of inactivity over the connection. When this value is reached, it will disconnect the call. You can set the idle timeout from 0 to 3600 seconds. The default setting is **120** seconds. If you select 0, the connection will never time out.

Enable IP:

IP RIP:

Remote IP Address:

Remote IP Netmask:

Enable Bridging:

Step 2: If advanced configuration is required for the operation on the ISDN, and its load sharing capabilities, then click **Multilink**. Alternatively skip to step 4.

Step 3: Click **OK** after completing the parameters in the following windows.

Connection Profile Configuration
Remote Office Access by ISDN

Multilink Usage	Two channels only when needed ▼
Upper utilization threshold (%)	85
Lower utilization threshold (%)	45
(Optional) 2nd Channel Remote Phone Number	

Cancel OK

Step 4: Skip to step 6 or click **Alternative Numbers** if it is required to set more than one choice of remote phone numbers. The screen will appear as follows,

Connection Profile Configuration
Remote Office Access by ISDN

Number of Alternate Remote Phone Numbers	<input type="text" value="2"/>
Alternate Choice #1	
Remote Phone Number	<input type="text"/>
(Optional Multilink) 2nd Remote Phone Number	<input type="text"/>
Alternate Choice #2	
Remote Phone Number	<input type="text"/>
(Optional Multilink) 2nd Remote Phone Number	<input type="text"/>

Step 5: Select the Number of **Alternative Remote Phone Numbers** and then enter the remote phone numbers in the corresponding blanks. Click **OK** to back to the previous screen.

Step 6: Click **OK** to back to main configuration screen and click **Apply and Test**.

4.3 Deleting Remote Office Access Profile

Follow the steps to delete a Connection Profile:

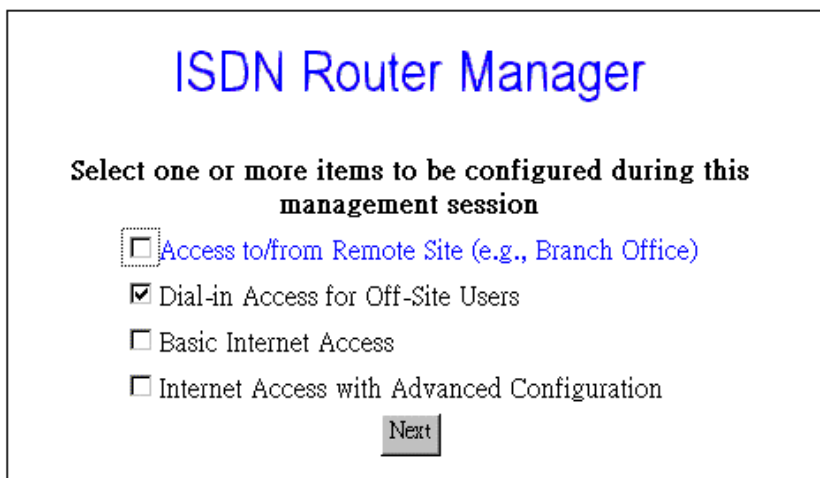
Step 1: Select **Connection Profiles** in the Menu Window.

Step 2: Highlight the entry in the list you want to delete, and click **Delete**.

Dial-in User Access Configuration

5.1 Configuring a Dial-in User Profile

Step 1: Select **Dial-in Access for Off-Site Users** in the **ISDN Router Manager** screen.



The screenshot shows the "ISDN Router Manager" window. At the top, the title "ISDN Router Manager" is displayed in blue. Below the title, the instruction "Select one or more items to be configured during this management session" is centered. There are four list items, each with a checkbox: "Access to/from Remote Site (e.g., Branch Office)" (unchecked), "Dial-in Access for Off-Site Users" (checked), "Basic Internet Access" (unchecked), and "Internet Access with Advanced Configuration" (unchecked). A "Next" button is located at the bottom center of the window.

Step 2: Select **Connection Profiles** from the Menu Window. Information about each dial-in user who is allowed to access is stored in a "connection profile." When you select **Connection Profiles**, the **Connection Profile Summary** screen appears only if there is any existing Connection Profile. Select **New** from the pull-down menu.

Step 3: Click **Next** to continue and display the **Connection Profile Configuration** screen. The following screen will appear.



The screenshot shows the "Connection Profile Summary" window. The title "Connection Profile Summary" is at the top. Below the title, the text "Select a Connection Profile" is on the left. On the right, there is a pull-down menu with a blue header "New" and two options: "Remote dial-in/out:Remote Site A" and "Remote dial-in/out:Remote Site B". At the bottom of the window, there are two buttons: "Next" and "Delete".

Connection Profile Configuration
Single User Dial-in by ISDN

Profile Name	<input type="text"/>
Call Back	<input checked="" type="radio"/> Yes <input type="radio"/> No
Call Back Phone Number	<input type="text"/>
Incoming Authentication	CHAP/PAP/MS-CHAP
User Name	<input type="text"/>
User Password	<input type="password"/>

Step 4: Enter the information of screen:

Step 5: Select **APPLY** to add the connection profile to it's database, or select **ADVANCED** for more options and proceed to following steps.

Connection Profile Configuration
Single User Dial-in by ISDN
Caution! Modifying a profile may be disruptive to active users

Caller ID Authentication	<input checked="" type="radio"/> Yes <input type="radio"/> No
Caller ID Number	<input type="text"/>
STAC Compression	<input checked="" type="radio"/> Yes <input type="radio"/> No
Idle Timeout (0-3600 seconds)	<input type="text" value="120"/>
Enable IP	<input checked="" type="radio"/> Yes <input type="radio"/> No

Step 6: Enter the information:

Step 7: Click **OK** to return to the previous screen and click **APPLY** to add the connection profile to it's database. Otherwise click **Multilink** if advanced configuration is required for the operation on the ISDN, and its load sharing capabilities. Then enter the following parameters.

Connection Profile Configuration
Single User Dial-in by ISDN
Caution! Modifying a profile may be disruptive to active users

Multilink Usage	<input type="text" value="Two channels only when needed"/>
Upper utilization threshold (%)	<input type="text" value="85"/>
Lower utilization threshold (%)	<input type="text" value="45"/>
(Optional) 2nd Call Back Number	<input type="text"/>

Step 8: Click **OK** to back to the previous screen and click **OK** again to back to Connection Profile Configuration screen.

5.2 Deleting Dial-in User Profiles

Follow the steps to delete a Dial-in User Connection Profile.

Step 1: Select **Connection Profiles** from the Menu Window.

Step 2: Highlight the entry in the list you want to delete, and click **Delete**.

5.3 Packet Filtering

To add a new packet rule or to edit an existing one, select **IP Filter** from the Configuration Menu. Then **IP Filtering Configuration** window will appear.

Step 1: From the **IP Filtering Configuration** screen, select the WAN profile of interest from the pull

IP Filtering Configuration

Incorrect configuration may cause undesirable behavior. Please refer to the user manual for more details

All IP packets for this profile

will be sent discarded except for those matching one or more of the following rules.
(Warning: Clicking the round buttons above changes the setting and takes effect immediately!)

Select to Edit	Number	Rule Name	IP Protocol	Local IP Address	Local Port	Remote IP Address	Remote Port
----------------	--------	-----------	-------------	------------------	------------	-------------------	-------------

down menu. For example, if your only need is to access the Internet, you should only select the Internet access profile.

Step 2: Select **send** or **discarded** as desired, which is equivalent to allow and disallow, respectively.

Step 3: If you are just starting, click **Add** to add a new selection rule. If you have previously defined rules, you will see those rules shown as entries in the rule table, and you can edit the rule by first highlighting the desired entry in the rule table followed by clicking the **Edit** button.

Step 4: In case of adding a new selection rule, the following screen shows.

IP Filter Configuration
Add a new rule

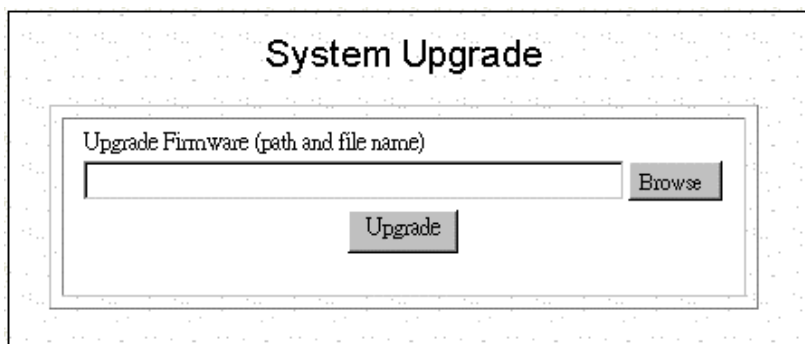
Rule No.	1
Rule Name	
Interface	Remote Site A
IP Protocol	Any
Local IP Address	range
(From)	
(To)	
Local Port	any
Remote IP Address	any
Remote Port	any

Apply Cancel

If you highlighted an existing entry in the **IP Filtering Configuration** window and clicked **Edit** instead, a similar screen will display, with all fields already filled out previously. Then you can make changes if necessary. If you highlighted an existing entry and clicked **Delete** instead, the corresponding entry in the rule table will be removed.

6.1 How to Upgrade the Firmware

Step 1: Select **System Upgrade** from the Menu Window. The following screen is displayed:

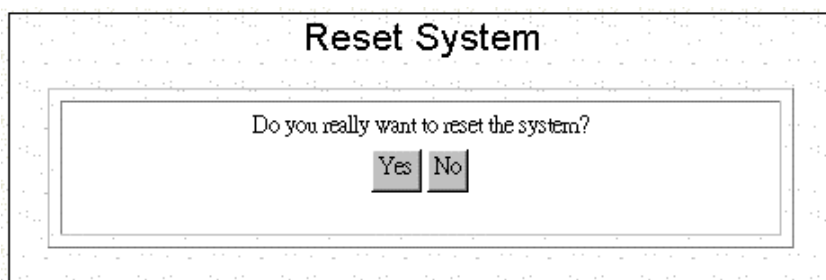


Step 2: To update ISDN Router firmware, download the firmware from Atlantis Land's web site and install the firmware in your local environment first, then from the above screen enter a path or filename, or click **Browse** to select a path to the firmware. Next, Click the **Upgrade** button below the file name and follow the onscreen instructions. The new firmware will begin loading across the network. After the operation is complete, be sure to reset the system to have the new firmware take effect.

6.2 How to Reset

You can reset the system from the System Tools Menu or by unplugging and plugging back in the power connector to the device. Follow the steps to reset the system:

Step 1: Select **Reset System** from the System Tools Menu. The following screen displays.

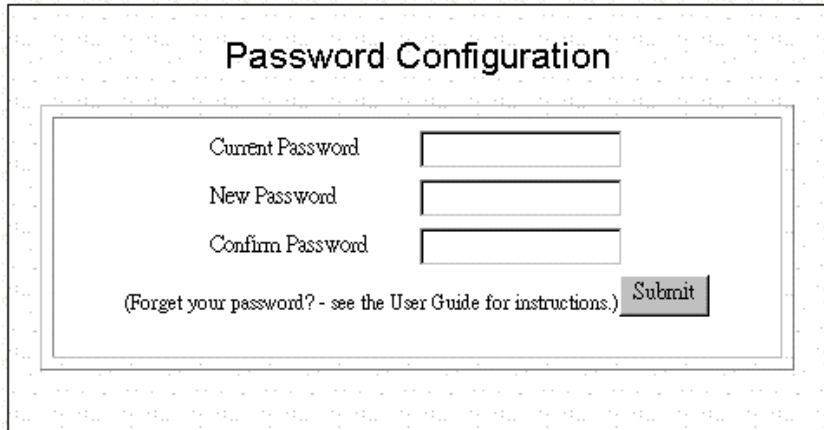


Step 2: Click **YES** to reset the ISDN Router.

6.3 How to Change ISDN Router Manager Password

After you start using the ISDN Router, you should change the factory default password. Follow the steps to change the password.

Step 1: Select **Change Password** from the System Tools Menu: The following screen displays:



Current Password

New Password

Confirm Password

(Forgot your password? - see the User Guide for instructions.)

Step 2: Enter the following information:

Current Password:

New Password:

Confirm Password:

Step 3 Click **Submit**.

6.4 What if I Forget the Password?

If you forget the ISDN Router Manager password, the only way to recover is clear the entire configuration and return the unit to its original state as shipped from the factory. Unfortunately, this means that you have to re-enter all of your configuration data.

To clear the configuration and restore the password to the default, follow these steps:

Step 1: Using the supplied Null Modem Cable, connect a console (or a PC running a terminal emulation program such as HyperTerminal) to ISDN Router Console port. The default port settings are 19200, N, 8, 1, no flow control.

Step 2: Turn off the ISDN Router, then turn it on again. In the console window, you'll see the message "Loading firmware...".

Step 3: When you see the message "Ready", **immediately** (within one second) press Ctrl+C.

Step 4: When this is complete, ISDN Router will return all settings to the factory default. The password will once again be "password".

Chapter 7

Troubleshooting

- **What is NAT?**

Answer. NAT is Network Address Translation. It is proposed and described in RFC-1631 and is originally for solving the IP address depletion problem. Basically, "each NAT box has a table consisting of pairs of locally private IP addresses and globally unique public IP addresses," by which the box can "translate" the private IP addresses to public IP address and vice versa. The device supports the feature of NAT. With proper configuration, multiple users can access the Internet using a single account via the NAT device

- **How many rules can be used in IP Filtering function?**

Answer. There are totally 8 filtering rules can be applied in the LAN and WAN ports.

- **How do I change the CLI mode form Advanced Prompt Mode into Express Prompt Mode? And vice versa?**

Answer. Press Ctrl+E key under CLI mode, it will show Advanced Prompt Mode, then press Ctrl+E key again, it will back to Express Prompt Mode.

- **Why should I need to assign static private IP Address to certain workstations or PCs?**

Answer. With built-in DHCP feature, each workstation or PC will be assigned by the device a different private IP address whenever power is on. For specific-purpose workstations, such as Mail server, FTP server, or Mail Server, we need to set up the static private IP address to prevent from losing connection.

- **How do I set up the Idle Time?**

Answer. The default setting for Idle Time is 120 seconds; meaning that router will shut down ISDN connection automatically once the router have no traffic on the connection over 120 seconds. To keep ISDN on without interruption, reset the Idle Time to 0.

- **Is there any effect if I add another DHCP server into the local network in which connected with an existing DHCP server?**

Answer. When it hooks up with power and network, it will detect whether there is any DHCP Server existed automatically. If it does, the device will shut down DHCP feature automatically, and will close this detective function as well.

Meanwhile, it will also detect the DHCP once Private IP changed.

- **Do I be able to pick up more than one configuration-selection at once while I set up Customize User Interface function?**

Answer. Yes, you do, but we would like to recommend that users should configure the router step by manual.

- **Why does the configuration lost from previous usage?**

Answer. Please keep in mind to save all configurations while you complete setting process.

Please choice Configuration Data Options\Save Button.

- **Why do I spend longer time to update firmware in GUI screen?**

Answer. Because the GUI of the device was written by JAVA program, we would like to suggest user to use Netscape Navigator, and please enable JAVA function under Internet Explorer environment. Please also keep in mind to close other application programs while updating firmware.

- **What's Data over Voice Channel?**

Answer. In Europe, there is some Tele-company have higher charging in data calls than voice calls. Using the Data over Voice Channel can save you more money.

- **Why can't I use ICQ software under the device?**

Answer. With built- in NAT (network address translation), it can't transfer ICQ packets via default TCP port to ICQ server. It means ICQ can't work well under such circumstances.

Solution. In order to solve this problem, we can use ISQ software with the function of automatically searching TCP port, or we can set up the TCP port to port 21(FTP port). For other games over the Internet, we must add a set of static network address translation to ensure TCP ports are used by the game.

- **If I have several legal IP addresses, how do I use it on WAN to LAN communication?**

Answer. The public IP address is used in PC connected with Router as a FTP/Mail/Web server, the others PC connected with Router will get the private IP address from the DHCP server of Router automatically.

Solution. First of all, to ensure it's under off-line condition, and complete the profile set up process, then add another Routing Table entry.

(1) Under GUI Mode:

Key in correct Public IP address for Gateway / Netmask

(2) Under CLI Mode:

Add a PAT Entry

Set IP LAN "Public Gateway Address" "Netmask",

For example, set IP LAN to 202.39.52.190 255.255.255.0

- **What can I do if PCs or workstations in the LAN can't be connected to Internet after setting public IP address?**

Solution. First, Please make sure that the public IP address you set is a legal public IP address, and then check that the public IP address has not occupied by other users. Second, make sure the IP address of each server is static and the IP Address/ Netmask/ Gateway information is completed.

And to make sure all PC is connects router with correct ISP.

Why can't I set up IP Filter function in GUI?

Answer. Due to the consideration of security, you only can set up Profile in GUI Mode, and for the LAN; it only can be revised under the CLI Mode.

Solution. Connect the PC to the device with a null modem type cable and enter CLI mode to start IP Filtering by Telnet or Hyper-terminal.

- **What should I do if the Firmware upgraded fail in the device, and it affects me have trouble to get into CLI & GUI screen?**

Answer. It will go through the process of Vector->Boot Code->App Code once its power on, the CLI can be used to update Firmware as long as the Boot Code doesn't expired.

Solution.

1. Open Hyper terminal
2. Make sure baud rate is 19200,n, 8,1,none
3. Connect the cable with both Com Port and Console Port
4. Turn on the router
5. Choice the connection speed, then you can update the Firmware by delivery the chosen Firmware file.

- **How can I get into Router what if I forgot the password?**

Answer.

If you forget the password, you can clean the password first, but all configuration will be disappeared once the password cleaned.

Solution.

1. To get into Hyper Terminal first.

2. Make sure baud rate is 19200,n, 8,1,none
3. Turn off the Router, and connect the Console Port Cable.
4. Turn on the Router.
5. Press Ctrl+C while the message “Loading Firmware” shows up.
6. Then it will show “Clearing System Configuration” once the system is ready.
7. Therefore, it will recover the default password while the router reboot automatically.

- **Why does the ISDN Router connect with ISP sometimes automatically?**

Answer.

The Router will build up connected function once LAN's PC has any packet need to send . This function calls Dial on Demand.

- **Why didn't the router offline automatically even my Idle Time exceeded?**

Answer.

There are several reasons for in-completed offline:

1. The setting Idle time is greater than the confirmed connection packet from ISP.
2. If there is any packet flow into the LAN, Idle Time will always recalculated.
3. LAN's PC is running Program for the Network, And Program send the packet to the Internet.

You could use the window in Show Profile Status to monitor the packet quantity in Network.

- **Why can't I connect successfully while I use Remote Dial-in?**

Answer.

Please be sure both Remote User's Username and password are correct, and keep the setting information identically at two sides of Router. The best way is setting the Router in MultiPPP.

